

Ont
Cabinet
Soc dev.

[Misc. pubus]
1974 [1]

#8

362-4731

c2
Government
Publications

CA2φN Z3

-74D08

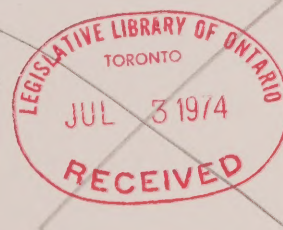
Background studies on day care
(See pap. 81)

EARLY EDUCATION -- AN APPRAISAL OF RESEARCH

Judy Garthson
Patricia Crawford

RESEARCH SERVICE

issued by the
Research Department



THE BOARD OF EDUCATION

FOR THE CITY OF TORONTO



1890-1891
1891-1892



CA20N 73

- 74D08

Government
Publications


EARLY EDUCATION -- AN APPRAISAL OF RESEARCH

Judy Garthson
Patricia Crawford

January, 1970

TABLE OF CONTENTS

	<u>Page No.</u>
INTRODUCTION	1
GROWTH OF THE EARLY EDUCATION MOVEMENT	2
HEAD START	6
<u>Research Studies Conducted to Evaluate</u> <u>Head Start</u>	10
OTHER PROGRAMMES	26
<u>O. K. Moore - Edison Responsive Environment</u>	26
<u>Montessori</u>	27
<u>Bereiter and Engelmann</u>	28
<u>Perry Preschool Project</u>	33
<u>Gray and Klaus - Early Training Project</u>	36
<u>Brunswick Cornwallis Project</u>	39
DISCUSSION	41
REFERENCES	45



Digitized by the Internet Archive
in 2024 with funding from
University of Toronto

<https://archive.org/details/31761120624846>

INTRODUCTION

Early Education -- how effective is it? Does it make a difference? And for how long? These are questions which in recent years have been asked increasingly by those people closely involved with young children -- educators, psychologists and parents, as well as politicians. Educators have asked such questions because of the large numbers of children that come to the elementary schools lacking what are considered to be the necessary basic social and cognitive skills; psychologists have questioned how much and what kinds of stimulation a child needs, and how early; many parents fear their children are doomed to an unsuccessful school career; and politicians in recent years have been responsible for allocating large sums of money for the support and development of such early education programmes.

A massive amount of research on such programmes has been published in recent years. These programmes have had a wide range of goals and have been conducted in a wide variety of geographical locations with varying resources available. Consequently, it is difficult to find clear, simple answers to the questions raised. The present survey of literature was carried out in an attempt to clarify the existing state of affairs and to isolate the relevant issues. Because literally hundreds of reports have been prepared; it was decided to concentrate on those studies dealing with programmes whose prime focus was the so-called "culturally disadvantaged" (Skene, 1966) child of at least three years of age, living in an urban area.

GROWTH OF THE EARLY EDUCATION MOVEMENT

The recent upsurge of interest in education for young children can be attributed to a number of factors. The launching of Sputnik in the early 1950's had tremendous repercussions on American education. There was increased pressure to improve quality and standards, especially in science and arithmetic, initially at the secondary school level. Many parents, also, responded to these concerns by emphasizing the development of intellectual and readiness skills in their young children either through home instruction or by sending their children to nursery school. However, often lower socio-economic families could not or did not avail themselves of these advantages, either because they did not recognize the need or when they did, had no resources available in either skills or money to pursue such goals. The provisions which have subsequently been made available for the purpose of meeting these goals, and which are the subject of this paper, are outside the realms of nursery school and traditional kindergartens as we know them.

Educators and child development specialists have become increasingly aware of the importance of the effects of early experience on learning. There are many studies (Irwin, 1948; Milner, 1951; Deutsch, 1964; Hess, 1964) to demonstrate that the development of cognitive abilities is determined largely by the availability of certain kinds of experiences in the child's early environment. In a discussion of these issues, Getzels (as cited in Frost, 1968) raised the next question, "How early must the opportunity for the relevant experience be available?" It is, of course, difficult to give a simple answer to this question because for each child the maturation

rate for specific abilities may be different. Nevertheless, an increasing number of studies have shown that it is the lack of early experience which may be most damaging. Much of this evidence has been derived from studies with animals, since it is ethically unacceptable to deliberately deprive young children of certain kinds of stimuli to study the ensuing effects. However, one particularly dramatic piece of evidence is from a study of adults who were congenitally blind and given sight by surgical operation. The perceptual behaviour of such individuals was studied (Senden, as reported by Hebb, 1949). It was discovered that these people had to learn to see. For a period of time, although there was no physical defect in their visual system, they could not visually distinguish a square from a triangle. They had to stop and count the corners as a young child does. Their difficulty in discriminating was not because they could not see,

"...but because they had not had the necessary experience in generalizing from vision.... given the same potentiality for learning at birth, the availability and timing of experience appear to facilitate or inhibit the expression of potentiality. And as we have already indicated, there are significant differences in this respect: the relevant experiences tend to be available for some children and not for others."

(Getzels, as cited in Frost, 1968, p. 40)

The third factor related to increased interest in early education is the "rediscovery of the poor." Greatly increased amounts of time, energy, money and intellect have been devoted to the problems of the poor in recent years. Present-day news media make it difficult to pretend that the poor do not exist. Likewise, such media make the disparities between lower and middle-class environments much more visible to the members of the lower-class. Getzels (as cited in Frost, 1968) talks about the "dilemma of discontinuity."

"The values, language information and methods of learning acquired by the middle class child are continuous with what will be required of him in school; the values, language, information and method of learning acquired by the lower class child are discontinuous with what will be required of him in school. It is as if the one group obtained a set of tools applicable to the school situation, but the school expected the two groups to perform as if they had equally applicable tools and resources."

(Getzels, as cited in Frost, 1968, p. 38)

However, putting all three and four year old children from "culturally deprived" areas into any compensatory programme will not in itself automatically solve the problem. The next question is -- what kind of programme will make a difference? And here the great diversity in almost every aspect of the many recent preschool programmes makes it clear that there is an equally great diversity of opinion as to how this question can best be answered. There are programmes in which the basic assumption is that the lower-class child differs from the middle-class child only with respect to the number of experiences he has had, not the kind of experience; therefore, such programmes attempt to supplement the child's experiences with activities that are a regular part of the typical nursery school. A second group of programmes assumes that the child is not academically prepared for school, and so prescribes more experience with school-related objects and activities, e.g., pencils, books, crayons and following directions. The third group of programmes assumes that the "culturally deprived" child has had fundamentally different kinds of experiences in terms of language development and values, so that specialized programmes are needed to help prepare him for the encounter with a new and different environment -- school.

The remainder of this paper will be concerned with a description and evaluation of a sample of the many programmes developed for "culturally deprived" children.

One caution must be stated. Although the terms "culturally deprived" and "culturally disadvantaged" are used frequently in the research literature, and in this paper, the reader should realize that there is a sense in which they are meaningless phrases. The child does not come from a cultureless group, as the term "culturally deprived" implies, but rather from a group whose culture is different from the predominant middle-class culture of our society. The term "culturally disadvantaged" similarly implies an unfavourable value judgment about the culture this child brings to the school. Secondly, it must not be assumed that this child has not learned anything from his pre-school environment, but rather that he has not learned and is not learning those skills and strategies which will ensure his school success. The child does have strengths as well as weaknesses, although in the school environment these strengths often become liabilities and his weaknesses are very apparent.

HEAD START

Hess claims that --

"Project Head Start, with the accompanying funds for assessment and research that it brings to the field, will probably be the most significant influence upon early education in this decade."

(Hess, 1968, p. 5)

Accordingly, it seems to be a fitting place to begin the discussion of particular recent preschool programmes.

Head Start, conceived in November, 1964, was originally intended as an experimental programme which would reach a limited number of children, i.e. 50,000 to 100,000. Seven months later, however, there were more than half a million children enrolled in an eight week summer programme in 2,500 Head Start centres across the United States. Overnight Project Head Start had become a 100 million dollar nation-wide programme which was one of the most popular in the United States' "War on Poverty."

Williams and Evans (1969)¹ point out one of the major difficulties they have found in implementing social action programmes such as Head Start:

"...we have found, over a wide range of social action programs, both how unyielding the causes of poverty are and how little we really know about workable techniques for helping the disadvantaged. The point is not that we are unable to derive 'reasonable' programs from bits and pieces of information and hard thinking. We can, we have. But, our experience seems to point up, over and over again, the

...continued

1 Walter Williams is Chief of the Research and Plans Division, Office of Research, Plans, Programs and Evaluation, Office of Economic Opportunity. John Evans is Chief of the Evaluation Division, Office of Research, Plans, Programs and Evaluation, Office of Economic Opportunity.

almost insurmountable difficulty of bridging the gap between brilliantly conceived programs and those which work in the field. Great pressures exist for new 'solutions' to social problems to be rushed into national implementation as soon as they are conceived. But the attempts to go directly from sound ideas to full-scale programs seem so often to end in frustration and disappointment."

(Williams & Evans, 1969, p. 120)

This describes very accurately what seems to have happened in the case of Head Start. In the space of only four or five months all the funding, community planning, teacher orientation and programme development had to be completed in each of the local centres. Although the Office of Economic Opportunity did not outline a specific curriculum to be followed in each centre, they did suggest a number of broad goals to be used as guidelines:

1. providing health services;
2. providing nutrition;
3. providing psychological services;
4. implementing social welfare services;
5. involving the parents;
6. establishing an educational programme for the children.

These goals reflect a concern for the "whole child" and the total environment in which he lives, not just his school life.

Thus, the Head Start centre:

"...represents drawing together all the resources -- family, community and professional -- which can contribute to the child's total development. It draws heavily on the professional skills of persons in education, health, nutrition, and social services. It recognizes that professional and non-professional can make a meaningful contribution. It emphasizes the family as fundamental to the child's total development and the role of parents in developing policies and participating in the program of the center."

(Osborn, 1965, p. 282)

As a result of the health programme which was intended to provide more adequate and accessible medical resources, thousands of medical problems were discovered which might have gone undetected during the regular course of activities in elementary school. In some cases, medical attention was also extended to include other members of the child's family.

The nutrition programme was also very important, since it is often claimed that it is useless to try and teach a hungry child. For many children, their only hot, nutritious meal of the day was received at the Head Start centre.

School psychologists conducted pre and post-testing in the programmes, and were involved in the administration of I.Q. tests and the diagnosis of special problems. Where necessary, referrals were made to community child guidance centres.

Families were frequently informed of social services available to them.

The parent participation programme was one of the most important of the goals. It was hypothesized that "parents who help plan and execute an activity which affects their family so much will be more willing to support this activity and, most important, be willing to strengthen home life in any way possible to help their children develop" (Brazziel, as cited in Frost, 1968, p. 300).

This contradicts the often quoted opinion that families of "culturally disadvantaged" children simply do not care about their children's schooling and replaces it with the idea that parents do care. However, often parents may not know what to do about their concern since they do not have the knowledge, background, or training to know what

they should be doing to help their children. Pines (1966) points out that the parents involved in one Head Start centre were not even aware that public library facilities could be used by anyone free of charge.

In many programmes, the parents were encouraged to help plan the activities, prepare the centre for the children, play games, tell stories, conduct field trips and, in short, to become a valuable resource of the centre.

Since there was no specific academic curriculum, the emphasis in the programmes varied widely from centre to centre. This point will be discussed more fully in the sections to follow dealing with specific research studies.

The extent to which each of the goals suggested by the Office of Economic Opportunity was realized in each of the centres varied considerably, no doubt due to the "crash" aspect of the programme. There were some communities where for a variety of reasons no real effort was made to include parents in any way. In other communities, there was little or no parent involvement due to a lack of time.

Another important factor in the implementation of Head Start was the need to recruit and prepare a large number of teachers in a very short period of time. The last minute grants given by the Federal Government did not give many of the centres enough time to set up programmes to prepare teachers (Knoll, 1966). In addition, since there were insufficient numbers of well-trained preschool teachers, some elementary school teachers were recruited who had not had previous experience with young children nor with children from economically "disadvantaged" homes. Some teachers were also ill-prepared to deal with other aspects of the programme, such as parent involvement, since

they were accustomed to fulfilling only a didactic teaching function (Lane et al., 1967). Consequently, there were instances in which children were highly regimented and programmes lacked flexibility. Hence, many opportunities for individualized instruction were lost.

One of the major successes of Head Start, however, has been in making people aware of the many problems besetting such a large-scale venture. As Osborn (1965) states it, one of Head Start's greatest contributions was "alerting the teachers to the needs of the poor." And Pines (1966) makes the following comment:

"Head Start acted as a catalyst throughout the nation -- making many old problems visible, forcing people to seek new solutions. Teachers we've brought face to face with poverty for the first time as they visited the children's homes. School administrators began to criticize the size and organization of their regular kindergarten and first grades. Psychologists discovered the need for specialists at the pre-school level to do the preventive work which becomes impossible if, as generally happens, everything is postponed until the third grade. Parents began to view school teachers and principals as people who might conceivably be on their side. And the lack of adequate day care emerged as a major barrier to the children's development."

(Pines, 1966, p. 24)

Research Studies Conducted to Evaluate Head Start

Since the first Head Start summer programmes were established in 1965, there has been a flood of articles and newspaper reports discussing both the merits and shortcomings of the project.

"Across a wide range of [8 week summer] projects it was found that, in general, participants who had been given various cognitive and affective tests at the beginning of the Head Start program showed gains when tested again at the

end of the program. However, virtually all the follow-up studies found that any differences which had been observed between the Head Start and control groups immediately after the end of Head Start were largely gone by the end of the first year of school."

(Williams & Evans, 1969, p. 120)

Since an Evaluation Division was not established by the Office of Economic Opportunity until the Fall of 1967, most of the responsibility for evaluation rested with the individual programmes prior to that time. Again, the hasty implementation of the Head Start programmes meant that often there was little time for adequate planning of sound evaluation. This is particularly evident in the early evaluation studies published, where one of the major difficulties was the lack of measures to assess adequately the stated objectives of the programme. In many cases, I.Q. tests were given simply because such measuring instruments were available, and despite the fact that the question of I.Q. changes as a result of the programme was often not of central concern. In many instances, the central concern was the affective and social behaviour of the child. I.Q. data is largely irrelevant to such matters and should not have been included in the test battery. In a recent talk,² Bettye Caldwell of Syracuse University made the point that a concentrated effort must be made to develop instruments which will provide data to assess the real goals of the programme. To this end, both Dr. Caldwell and Burton White of Harvard University have spent considerable time in the past two years developing observational scales for use with young children.

In addition, it appeared that some problems of evaluation instrumentation were further complicated because of the frequent failure to specify the goals of the programmes in behavioural or performance terms. It is difficult to assess the magnitude of this problem since

2 Society for Research in Child Development, Santa Monica, California, March, 1969.

in many instances the written report of the evaluation is relatively short and many questions are left unanswered. It is difficult also to determine whether the constraints imposed by the format of a brief report are responsible for a failure to specify goals in detail or whether such a report is in fact an accurate reflection of the existing situation. Often an evaluation report begins with a discussion of the research design which assumes that once the reader realizes the study is concerned with Head Start, he now has sufficient information about the aims and specific methods of the particular programme being discussed. When one remembers that each Head Start centre was free to develop its own curriculum around the special needs of the children it served, the inadequacy of such reports is obvious.

It should be pointed out that although guidelines for programme development were established in six areas, most of the research literature on Head Start deals only with one goal -- the academic focus of the programme.

From the many research articles available, four of the more detailed reports have been selected for discussion here. These are intended to give the reader some idea of the nature of individual programmes and the many problems encountered by the researcher in attempting to evaluate their effects.

Riley & Epps (1967) -- "Headstart in Action"

In their book "Headstart in Action," the authors give a very detailed account of their experiences in organizing, implementing and running 20 Head Start centres serving 300 children in the central Los Angeles area. Their reports are especially interesting because they detail the many problems encountered and decisions to be made in the

preliminary organization of the centres. This information, rarely discussed in research literature, illustrates all too well the magnitude of the task accomplished in the setting up of a Head Start centre in only a few months. For example, one of the six general goals outlined for Head Start by the Office of Economic Opportunity involved nutrition -- the children were to have a hot meal every day. Oftentimes those organizing and running the centre were teachers or parent volunteers, who were not necessarily knowledgeable in many aspects of the food serving business, especially when the budget allowed only 28¢ per child per day. It was only through trial and error that they found that paper plates were too expensive, plastic forks were not strong enough, and that it is impossible to serve preschoolers cafeteria style. They cannot line up, wait or eat in shifts! These represent only a small sample of the problems in only one area of the programme!

The report provides a picture of other conditions which were characteristic of many centres across the country. The researchers had two weeks to set up their evaluation procedures, to decide what should be measured and how it should be measured. Their first attempts to answer these questions illustrate very well the naiveté and unrealistic expectations of many of those involved initially with Head Start programmes. For example, how can such a programme expect to overcome four years of living in an impoverished environment in eight short weeks!

Riley and Epps chose a wide variety of tests which were intended to provide measures of the child's physical, mental, language and social-emotional development -- the Peabody Picture Vocabulary, the Gesell Copy Forms, the Draw-a-Person Test, the Riley Articulation and Language Test and the Vineland Social Maturity Scale. These tests were administered

at the beginning and end of the programme to "see if the children had learned what would normally be expected or if it were more than would be expected" (p. 146). The decisions made regarding the selection of tests and the hypotheses held by these researchers regarding the general outcomes of the programme were characteristic of many researchers. Some of the tests they selected indicate that rather than being concerned only with whether or not the specific programme developed for the children was successful, they were concerned with the stage of development reached by these children -- i.e. how retarded were they in each of the four above-mentioned areas compared to middle-class children? This is, of course, a legitimate and important question, but the procedures used to provide answers for this question are not necessarily the most economical or efficient for attempting to determine whether the objectives of a specific Head Start programme have been met. For example, since the improvement of physical skills was not a specific goal in this programme, why collect data to measure changes in physical development? In this particular case, such data are irrelevant and it is not surprising that the results of a test such as the Gesell Copy Form indicated little change as a result of having participated in the programme.

It was found that the greatest gains were made by the children in social maturity. The results of this test were most pertinent to answering questions concerning the success of the programme since it provided a measure of change related to one of the specific behavioural goals of the programme. The children were given help in developing skills related to independence and self-reliance, such as learning to ask for what they needed, doing up their own clothes and going to the store by themselves. On the average, the change in Social Maturity Scale scores

indicated that such help was successful. It should be pointed out, however, that despite the average gain of 1.9 years on the Social Maturity Scale, over half the children were still a year behind their age level. Although the extent of the social retardation was drastically reduced, the brief summer programme was not sufficient to bring all the children to a level comparable with other children of their age level.

The results of other tests showed similar patterns, i.e. although there were some gains, most of the children still scored below their age level. Although two of the tests measured some aspects of language, such as extent of vocabulary (Peabody Picture Vocabulary), and articulation, they did not directly assess the development of oral language which was the expressed goal of the programme.

It should be noted that although some of the tests were not relevant to an assessment of the stated goals of the programme, the information obtained from such tests was not unimportant if considered from a somewhat different viewpoint. The tests provided information concerning the degree of retardation of the children in physical, mental, language and social-emotional development. Since Riley and Epps reported difficulty in finding literature describing the specific weaknesses of "disadvantaged" children such test results could be used as guidelines in the planning of future programmes. Whether these results were used in this manner was not reported.

NOTE: Riley and Epps (1967) reported that the children who attended Head Start had a higher IQ than the children who did not attend Head Start. This was true for the children who attended Head Start for the first time and for the children who attended Head Start for the second time. The children who attended Head Start for the first time had a higher IQ than the children who did not attend Head Start for the first time. The children who attended Head Start for the second time had a higher IQ than the children who did not attend Head Start for the second time.

The Riley and Epps study was typical of many research reports of Head Start programmes in that they did not utilize a control group

as part of their design. Much criticism has been levelled at the evaluations of Head Start on this point since the critics claim that the researchers have no means of determining whether the children would show such gains in test scores even if they had not participated in a Head Start programme. If children in a control group, also, showed similar gains, this could be interpreted as grounds for discontinuing further early education programmes.

The study by Hodes is somewhat unique in that he incorporated two control groups in his research design. Hodes attempted to determine whether there was any change in a number of educational characteristics in three different groups of children attending kindergarten in Camden, New Jersey in 1965. The three groups of children were designated as follows: (a) "culturally disadvantaged" children who attended a Head Start programme in the Summer of 1965; (b) "culturally disadvantaged" children who did not attend Head Start; and (c) non-"culturally disadvantaged" children who did not attend Head Start. Again, as is common in Head Start research literature, Hodes did not outline the specific goals of the four Camden Head Start centres, therefore it is again difficult to ascertain whether the five areas he chose to measure would provide the best assessment of the effects of the Camden summer programme, i.e. conceptual maturity, visual discrimination, auditory discrimination, recognition vocabulary and articulation. As was the case with the Riley and Epps study, and undoubtedly many others conducted in the early days of Head Start in the Summer of 1965, such test information could have been valuable if it were gathered for the purpose of pinpointing those areas in which the disadvantaged children in that particular community needed extra help. However, when such test

information is gathered with the purpose of determining whether the programme implemented was successful, it may be completely inadequate or irrelevant for reaching such a decision.

Hodes' first hypothesis was that "culturally disadvantaged" children who attended a summer Project Head Start would score higher on all of the measured characteristics at both the beginning and end of the kindergarten year than "culturally disadvantaged" children who did not attend Head Start.

On four of the five tests administered, there was no difference between the scores of "culturally disadvantaged" children with and without Head Start experience, either at the beginning or the end of kindergarten. There are two possible explanations for these results: (1) the Head Start programme had no effect; (2) the tests administered did not tap the areas in which Head Start did make a difference, but the areas emphasized in this programme were not mentioned. The one test on which the Head Start children did score significantly higher than those "culturally disadvantaged" children who did not attend Head Start was the Goodenough-Harris Draw-a-Man Test used as a measure of conceptual maturity. The differences were significant at both the beginning and the end of the kindergarten year.

Hodes' second hypothesis was that there would be no significant differences at either the beginning or the end of the kindergarten year between children who attended Head Start and those who were not "culturally disadvantaged." The results did not support this hypothesis. In almost every instance, the non-"culturally disadvantaged" children scored significantly higher than the children who had had Head Start experience. One or two of these results however were borderline. For example, the differences

at the beginning of the year, in favour of the non-"culturally disadvantaged" children, on the Recognition Vocabulary and Conceptual Maturity Tests had diminished by the end of the year and were no longer significant: the children in the Head Start programme gained more during the year than the non-"culturally disadvantaged" children. According to Hodes, the overall results seemed to indicate that participation in Head Start was related to improvement of test scores, but not to the point where the effects of poverty were completely overcome. However, as Hodes says:

"It could undoubtedly be reasoned that an eight week compensatory program could not logically be equal to five or six years of a more advantaged educational environment."

(Hodes, 1966, p. 45)

Hodes did list limitations which he felt could be applied to his study and which are likely characteristic of other Head Start evaluation studies:

- (1) the lack of fulltime, specially trained examiners to administer the tests;
- (2) due to a lack of available information, the inability to match the groups on personal and socio-economic factors such as race, occupation of parents, and number of children in the home;
- (3) variable test conditions from school to
 ;
- (4) the fact that the effects of Head Start may not be measurable in the first year of school or by the particular tests used in this study. There could be other areas of change or growth which indicate success in the meeting of Head Start objectives but which were not tapped by the particular tests used.

Wolff & Stein, 1966) -- "Six Months Later -- A Comparison of Children Who Had Head Start, Summer, 1965, With Their Classmates in Kindergarten: A Case Study of the Kindergartens in Four Public Elementary Schools, New York City - Study I"

The Wolff and Stein study was a large-scale evaluation of part of the programme sponsored by the New York City Board of Education in the Summer of 1965. The study, conducted six months after the end of Head Start when the children were enrolled in kindergarten, attempted to determine whether children who had had Head Start experience showed a greater readiness to enter first grade than their classmates who had not participated in Head Start. In order to gain a comprehensive view of the situation, the researchers not only tested the children's achievement directly, but: (a) asked the teachers to rank the children in their classrooms with regard to readiness to enter grade one, and to rate each child in the class relative to his peers on several characteristics, including initial adjustment to school, speech, work habits, knowledge of concepts, behaviour towards peers and towards the teacher; (b) observed the teachers in their classrooms; (c) interviewed each teacher; (d) visited the parents to obtain their views on Head Start; (d) interviewed the child himself about his Head Start experience (Wolff, 1966).

The children included in this study attended kindergarten in four public elementary schools in New York City. The Head Start children in these schools had attended one of three Head Start centres in the Summer of 1965. The centres were chosen to meet two criteria -- (1) that they were considered to be "very good" by the supervisory staff of the programme, and (2) that one was all-Negro, the second predominantly Puerto Rican and the third was "mixed" in racial and ethnic composition.

Briefly, the results were as follows:

1. Teacher's Ranking of Child's Readiness to Enter Grade One

After six months of kindergarten, a greater proportion of the Head Start children were ranked in the top 30 per cent of their classes as compared with those who had not attended Head Start. There were, also, fewer Head Start children in the bottom 30 per cent of the class than non-Head Start children. Although no tests of significance were reported, enough information was provided by Wolff and Stein so that a test of proportions could be performed on the data. The results indicated that despite Wolff and Stein's conclusion, there was no statistically significant difference between the proportion of Head Start and non-Head Start children ranked in the top 30 per cent of the class as being most ready to enter grade one. The same holds for those ranked in the bottom third of the class, i.e. no statistically significant differences.

2. Teacher Ratings of Child's Behaviour

The teacher rated 70 per cent of the Head Start children as having adjusted to school routines by the end of September as opposed to only 56 per cent of the non-Head Start children. However, by the end of November most of the children were judged as being fully adjusted to school routines, so that any advantage the Head Start children had in terms of this behavioural characteristic had disappeared.

With regard to the ratings of the child's behaviour toward his peers, Wolff and Stein report that Head Start children had somewhat higher ratings than non-Head Start children, while behaviour towards the teacher was not at all affected by the Head Start experience after six months of kindergarten experience. Again, although not reported, the above difference was not statistically significant.

Stein did not offer any tentative explanation for such results, it could be hypothesized that the Head Start experience provided the children who participated, with a referent against which to compare their kindergarten teachers. Perhaps they were more sensitive to good and poor teachers, whereas non-Head Start children had not had any opportunity to form expectations about what school and teachers were like. They had no point of comparison to help them discriminate between a good and a poor teacher. Similar findings have been reported by Beller (1965) in an evaluation of Head Start summer programmes in Pennsylvania. Although his research was concerned with the immediate impact of Head Start and not the perseveration of its effects six or eight months later, he found no lasting effects from a programme having inadequately-prepared teachers and poor facilities; this was in contrast to those programmes in which there were adequate teachers and good facilities.

Parent Interviews

On the whole, the parents whose children had attended Head Start showed tremendous enthusiasm for the programme, reporting that they saw many improvements in their children which they attributed to the programme. Their major criticisms were that many parents had not heard about the programme in time to send their children and that they wanted more emphasis on the academic areas, i.e. more arithmetic and reading readiness.

Although this study by Wolff and Stein is one of the largest and most comprehensive undertaken to investigate certain aspects of the effects of Head Start, there are several major limitations (Gordon, 1966) which the reader must keep in mind when evaluating its results:

- (a) Since Wolff's study was conducted six months after the conclusion of the Head Start programme, and did not study the curriculum and programme to which the children were exposed, we have no way of knowing just how good or bad the curricula of these programmes were; whether they were language-oriented or whether social, emotional or motor development was emphasized. We, thus, have no basis for determining whether the findings of no difference between Head Start and non-Head Start children is a reflection of the ineffectiveness of the programme in providing the children with a "head start," or whether those areas in which Head Start did make a difference were not tapped by the measures used. Gordon (1966) points out that we have "some methods which have been demonstrated to be effective with some children under some circumstances. This fact suggests that curriculum variables and pupil variables are crucial considerations in any effort at assessing the impact of such a programme of intervention."

- : The conclusions drawn by Wolff and Stein must be interpreted with caution in light of the point already made that no statistical tests were conducted, and in many instances the differences reported were very

It should be remembered that the groups of Head Start and non-Head Start children were not matched and as reported by Gordon (1966), the Head Start children tended to come from families with lower incomes and less education. "Good research techniques" would undoubtedly favour the matching of the two groups as closely as possible to eliminate the possibility that factors other than those being investigated (i.e. the Head Start programme) might influence the direction of the results. The failure to match perfectly may

have been an indication that those children for whom Head Start was intended, i.e. the hard-core poor, were in fact served by the programme.

The concluding point of Gordon's remarks on the Wolff study is most apt:

"Despite the technical problems in this study, Wolff's logic if not his data, supports the position that although there are many possible products of Head Start participation, few are as yet definitively measured. More importantly, in whatever form such gains appear, they can be dissipated in the absence of continued development and nurturance in the primary school experience."

(Gordon, 1966, p. 4)

Westinghouse Learning Corporation (1969):-- "The Impact of Head Start: An Evaluation of the Effects of Head Start on Children's Cognitive and Affective Development (Executive Summary)"

This study, carried out from June, 1968 to May, 1969 for the Office of Economic Opportunity, attempted to answer the following question:

"To what extent are the children now in the first, second and third grades who attended Head Start programmes different in their intellectual and social-personal development from comparable children who did not attend?"

(Executive Summary, p. 2)

A sample of children who had attended 104 Head Start centres across the United States, and a matched sample of control children were administered a series of tests to assess their degree of cognitive and affective development. The parents of the children were interviewed and their primary grade teachers were asked to rate the children on achievement motivation.

In general, the results indicated that there were no significant differences on any of the measures between the Head Start children who

had attended either a full year or a summer programme and the control group. These results pertain to the total national sample. In addition, analyses were made for certain subgroups of the total sample, e.g., in terms of geographic region and racial/ethnic composition. These sub-analyses revealed no significant differences between those children who had attended summer programmes and their controls. However, where centres were located in the southeastern United States, in core cities of mainly Negro composition, and where the children attended a full year programme, there were significant differences in favour of the Head Start children, primarily in the cognitive measures. It must be pointed out, however, that although scores of Head Start children were significantly higher than those of the control group, their scores were still considerably below national norms on the standardized tests of language development and achievement.

The study concludes that:

"Head Start as it is presently constituted has not provided widespread significant cognitive and affective gains which are supported, reinforced or maintained in conventional education programs in the primary grades."

(Executive Summary, p. 9)

However, in view of the mixed results, the fact that Head Start children return to an impoverished environment after they leave the programme, that the study was conducted after the children had been out of Head Start from one to three years, and the fact that some Head Start programmes were poorly implemented, Westinghouse recommended that:

"...large-scale efforts and substantial resources continue to be devoted to the search for finding more effective programs, procedures, and techniques for remedialing the effects of poverty on disadvantaged children."

(Executive Summary, p. 11)

OTHER PROGRAMMES

The Head Start effort received so much money, touched so many people, sometimes but lightly, received so much attention, first favourable and then less favourable, that there is a tendency to overlook other special programmes and materials that were developed independent of Head Start. The most unusual development in terms of equipment is O.K. Moore's "talking typewriter" which is now called the Edison Responsive Environment.

According to Moore (1964), the optimal environment for acquiring complex skills is one that is responsive to the learner; a responsive environment being defined as one which permits exploratory behaviour in the child, informs the child immediately about the consequences of his actions, is self-pacing, i.e. the child determines the rate at which events occur, and permits him to make extensive use of his capacity for discovering relations.

Moore designed a responsive environment booth which is windowless, sound-proofed, air-conditioned, panelled in natural wood and contains what appears to the child to be only an electric typewriter but which in fact includes a computer in-put and read-out device and an audio-recording system. Moore provided these physical conditions to allow little opportunity for distraction and to ensure a sense of privacy for the child.

Each day, the child is given the option of going to the booth where he can stay as long as he wishes, to a maximum of 30 minutes. He is under no obligation to report to anyone on his activities while in the booth, as Moore's aim is to have the child feel that he alone is responsible for his actions while in the booth.

On the child's first visit, he is given no instructions. Most children, however, when confronted with the typewriter begin some exploratory activity; when the child presses a key the letter symbol is typed in large print and a voice names the letter. Although no two children proceed in exactly the same manner, some try each letter in a row, methodically, while others press letters in a random manner, they all progress at their own rate through a similar sequence from the naming of letters to the naming of words, the formation of phrases and sentences and the writing of stories. For a more detailed description of the equipment and procedures the reader is referred to Moore (1964 and 1968).

Although Moore has collected a great deal of data on the children who have participated in his programme, very little of his research has been published. Moore's project might be described best as developmental as opposed to an experimental project, since the purpose of his data collection has been to provide information for the revision of on-going procedures and equipment.

Moore's programme has been subjected to some of the difficulties encountered by Head Start, e.g., a failure on the part of the preschool and elementary staff to revise their curricula to take into account the child's development during his daily experience in the responsive environment booth.

Another programme whose philosophical basis is in some respects reminiscent of Moore's ideas is that developed and established by Maria Montessori (1964) sixty years ago. Like Moore, one of Montessori's central themes is the idea of auto-education, i.e. the child educates himself. Both Moore and Montessori believe that often the teacher inter-

feres too much with the child during learning. Where Moore has gone to elaborate lengths to provide the child with the space, time and facilities to pursue activities in his own way, Montessori instructed her teachers to present materials to the child and then to stand back and allow the child to learn how to use them himself. The major role of the teacher was to observe the child's progress and judge when he was ready to take the next step.

Like Moore, Montessori placed a great deal of emphasis on the use of certain materials and sensory experiences in the development of concepts. However, whereas Moore has been able to draw on the tremendous technological advances of the past 50 years to design very sophisticated and elaborate materials for the children to use, Montessori's materials were much less elaborate by today's standards, e.g., graduated blocks, sandpaper letters, fabrics of different textures, colour tablets. One major respect, however, in which Moore and Montessori are not in agreement is the manner in which the materials are to be used. In a Montessori programme the children must use the materials in the way in which they were intended to be used; the children are not encouraged "to experiment, to dramatize, to improvise, to create" (Spock and Hathaway, as cited in Frost, 1968, p. 75).

Although the Montessori method has enjoyed an increase in popularity in recent years, little systematic research has been done to evaluate its usefulness and effectiveness with "culturally disadvantaged" children.

At the other extreme to Moore and Montessori with their emphasis on equipment, is the philosophy and programme developed by Bereiter and Engelmann. Their programme, especially for "culturally

disadvantaged" children, is based on the theory of "cumulative deficit," i.e. the idea that "culturally disadvantaged" children fall further and further behind in school as they get older. The school system cannot be held completely responsible because the children are often already far behind their more advantaged peers when they enter kindergarten. It is assumed that these children are behind to begin with and "...must progress at a faster than normal rate if they are to catch up" (Bereiter & Engelmann, 1966, p. 6-7).

Bereiter and Engelmann advocate that more concrete demands be made of the child as learner and the teacher as instructor so they favour a completely cognitive curriculum, "...focusing upon academic objectives and relegating all non-academic objectives to a secondary position" (1966, p. 10). Teachers must focus on the disadvantages of the children which are relevant to their schooling.

The core of the Bereiter and Engelmann academic curriculum is language since "...there is reason to believe that if the language deficiency is allowed to remain, other handicaps in knowledge and intellectual skills cannot be remedied" (Bereiter & Engelmann, 1966, p. 13).

They have established a set of fifteen goals, a precise set of statements dealing with a very narrow range of abilities and skills ranging from the

"...ability to use both affirmative and not statements in reply to the question 'What is

to

"A sight-reading vocabulary of at least four words in addition to proper names, with evidence that the printed word has the same meaning for them as the corresponding spoken word..."

(Bereiter & Engelmann, 1966, pp. 48-49)

These goals are accomplished via a highly structured direct verbal instruction programme which is probably the most controversial method in preschool education today. Edwards (1968) refers to it as "direct academic force feeding" and the "pressure-cooker approach"; Ahlfield (1969) calls it the "'mini marine corps' approach."

Bereiter and Engelmann started with fifteen "culturally disadvantaged" children and three teachers. The children were divided into three groups on the basis of ability. Each group of five children rotated from one teacher to another, with each teacher specializing in one of three subject areas -- arithmetic, language and reading.

Unlike Moore and Anderson (1961), who made one of the criteria on which they based their programme the children's like or dislike of it, Bereiter and Engelmann make no pretense of the fact that the children must participate whether they want to or not. They feel that "teaching implies, first that the teacher is convinced the thing is worth doing, whether the child wants to or not, that the teacher knows how to teach -- that his way, if not the best, is at least better than leaving things to happenstance" (Pines, 1966, p. 61). According to Bereiter (1966), rather than rebelling, "...the children become more wholeheartedly involved in the instructional process as time goes on" (p. 6).

Bereiter and Engelmann's conception of the ideal teacher sounds more similar to a drill sergeant than to the traditional warm child-centred nursery school teacher. Indeed they state that an elementary school teacher is usually a better teacher for their preschool programme than the nursery school teacher who must "unlearn" many of her former methods and change her outlook towards forcing the child to learn. The

teachers are not to create their own curricula within the framework of the programme, but rather they are carefully instructed to follow a very specific prepared curriculum which outlines every step of the programme. As Ahlfeld (1969) points out, this results not only in the teachers sometimes feeling that the creativity of the children is being threatened but that their own creativity as teachers is being destroyed.

In response to the criticisms most often made about their programme, Bereiter and Engelmann make the following types of statements. In reply to the criticism that their programme produces stress, they say that the child would meet stress when he first went to school so it is valuable for him to learn to handle it earlier. They claim that children do not need another mother at school, in reply to those who react with horror to the non-emotional relationship between teacher and pupil. They avoid the question of creativity by pointing out that the child is not in the preschool for the entire day and besides there is not any evidence to support the notion that the traditional preschool promotes creativity. They claim that the children do not need to learn the social skills involved in playing together; the children are already aware of these, so that they should be taught the skills of working together. As to the question of how well the children generalize their learning to non-school situations, the authors say that, although this may be desirable, it is not essential.

Because the major emphasis in Bereiter-Engelmann programmes is on language, most studies have used the Illinois Test of Psycholinguistic Abilities (ITPA) and the Stanford-Binet as measures to evaluate the effects of the programme.

Results on the two subtests of the ITPA which are used most frequently, i.e. the Auditory Vocal Automatic and Auditory Vocal Association subtests, are not completely consistent. Bereiter and Engelmann (1966) and Reidford and Berzonsky (1967) found that children who initially scored a year or more below average reached the average level of performance for their chronological age after several months of participating in a Bereiter-Engelmann programme, whereas Karnes (1966) reported no significant differences and Berzonsky (1967) found some improvement, but the gains were not significant.

The results on the Stanford-Binet consistently show a gain in I.Q. points after several months in the programme (Bereiter and Engelmann, 1966; Reidford and Berzonsky, 1967; Karnes, 1966).

A number of studies have been done to compare the Bereiter-Engelmann programme with other preschool programmes. A comparison (Rusk, 1968) of Bereiter-Engelmann with a Head Start programme showed that after a six week programme more children in the Bereiter-Engelmann programme increased their scores on both the Caldwell Pre-School Inventory and the Engelmann Concept Inventory as compared with Head Start children. Rusk concluded that:

"...to the extent that the concepts measured by the two tests are necessary for success in school...the children in the experimental programme were better prepared to succeed in kindergarten than the children in the control (i.e. Head Start) programme."

(Rusk, 1968, p. 33)

A study by Di Lorenzo, Salter and Brady (1968) in New York State comparing eight programmes concluded that the most effective programmes for "disadvantaged" prekindergarten children were those with the most specific and structured programmes. One of the programmes falling in this category was one using the Bereiter-Engelmann approach.

Using the Stanford-Binet and the ITPA, Karnes (1968) compared the effects of five programmes, i.e. traditional, Montessori, Bereiter-Engelmann, a community-integrated programme, and Karnes' own programme which was fairly structured. Rusk reports her conclusions as follows:

"...the two structured programmes, Bereiter-Engelmann and Karnes, enhanced the intellectual functioning of disadvantaged children significantly more than did the other three programmes."

(Rusk, 1968, p. 12)

Two other popular and widely reported studies, Weikart's Perry Preschool Project in Ypsilanti, Michigan, and Klaus and Gray's Early Training Project in Tennessee also emphasize language and cognitive goals in their programmes.

Weikart's programme, established in 1962, is one of the few which has been in operation long enough to be able to begin providing "long term" data on the effectiveness of such an intervention programme.

The children who participated in the programme were three and four year old Negro children who came from culturally deprived families. They were assigned to one of two groups, experimental or control, which were matched on the following criteria: (1) mean rating on a cultural deprivation scale which took into account the father's occupation, parents' education, and the number of people in the home; (2) mean I.Q. rating (usually in range of 75 - 90); (3) sex; and (4) percentage of working mothers. The experimental group attended preschool five mornings a week and received a two-hour home visit once a week by the teacher. Contact with the control group was limited to testing and collection of background information. The first group of children, designated as Wave 0, started preschool in 1962 at age four. They spent one year in preschool before going on to kindergarten. Wave 1

started preschool in 1962 at age three. They attended two years of preschool before going on to kindergarten. Wave 2 started two years of preschool in 1963 at age three, and so on. This design provides for the possibility of numerous replication studies as well as the gathering of longitudinal data.

The morning programme is described by Weikart (1967) as being:

"...a permissive but teacher-structured one to guide the youngsters toward an increased awareness of the world around them. Heavier emphasis is placed on verbal stimulation and interaction, dramatic play, and field trips than on social behaviour and other traditional concerns of nursery schools."

(Weikart, 1967, p. 1)

The purpose of the home visit programme was to involve the mothers, to provide the teacher with an opportunity to assess each child's specific problems and to provide individual teaching for each

A brief summary of Weikart's findings follows.

After one year of preschool, the Wave 0 experimental group showed a gain of thirteen I.Q. points and was significantly different from the control group. However, after the second year, during which both experimental and control group children attended kindergarten, there was no significant difference between the two groups.

Similar results were found for both Wave 1 and Wave 2, i.e. there were significant differences in favour of the experimental group at the end of both the first and second years of preschool.

(2) ITPA

Generally, at the end of the second year of preschool, scores for the experimental group exceeded those of the control group. However, once the control group had spent one year in kindergarten, these differences tended to disappear.

(3) Peabody Picture Vocabulary

Results for the PPVT were generally similar to those reported for the ITPA, i.e. on the whole, preschool experience did affect the scores obtained by the experimental group. Further, the results of Wave 0 showed that after one year's experience in kindergarten, the control group, also, gained so that by the end of kindergarten there was no significant difference between the experimental and control groups. Results were not available for Waves 1 and 2 by which to compare the experimental and control groups after the control group had had the opportunity for a year's experience in kindergarten.

(4) Vinter Rating Form and Ypsilanti Rating Scale

In addition to the measures of intellectual ability and achievement, the Vinter Rating Form and Ypsilanti Rating Scale were completed by the kindergarten teachers of the Wave 0 children. The results of the Vinter showed that only 3 of the 37 items resulted in significant differences between the two groups; the experimental children being rated as more possessive of the teacher, more interested in subject matter, and showing initiative more often. On the Ypsilanti scale, the experimental children were rated higher on two of the eleven dimensions, i.e. level of verbal communication and level of imagination; their mothers were rated higher on both of the scales pertaining to them, i.e. showing co-operation and prediction of future school relationship.

(5) Parental Attitude Research Instrument

The Parental Attitude Research Instrument was given on two occasions, Fall and Spring, to the mothers in both the experimental and control groups of Wave 0 and to mothers of children attending a white, middle-class kindergarten in another school in Ypsilanti. When the results of the two administrations were compared, it was evident that the mothers of the children in the experimental group had shifted significantly towards the middle-class position on some of the subscales, but there was no change in the control mothers. Since the changes occurred in areas which were not of major focus in the teacher-parent discussions during the home visits, Weikart felt that:

"...the mere interaction with a middle-class role model over a prolonged period of time served to change some of the attitudes which deviate markedly from those of middle-class mothers. If their genuine attitudes did not change, at least their knowledge of the socially approved reply can be said to have been affected. This surface change, too, is of significance."

(Weikart, 1964, p. 51)

The likelihood of attitude change was not related to the mother's education, the cultural-deprivation rating, or the number of children in the family; however, it was found that the older the mother and the closer to youngest in the family was her child participating in the programme, the more likely were her attitudes to shift.

Another long-term intervention programme under the direction of Gray and Klaus (1966) was implemented in Murfreesbro, Tennessee, in the Summer of 1962. The 62 Negro children who were selected to be included in the project were assigned to one of three groups: Group 1 attended preschool for three consecutive summers and had contacts with a home visitor during the winter months; Group 2 had a similar sequence

beginning one year later, i.e. two summers of preschool and one winter of home visits; Group 3 was a control group which received all of the pre and post-tests on the evaluative instruments used, but had no preschool experience. A fourth comparison group was also established in a nearby city to serve as a second control group.

The major aim of the programme was to prevent the progressive retardation frequently thought to characterize "culturally disadvantaged" children as they progress through school. In an attempt to accomplish this goal, Gray and Klaus emphasized two areas in their programme. The first was related to attitudes toward achievement, especially as related to the kinds of activities expected in school -- persistence, ability to delay gratification and interest in typical school materials. The second area was the development of those skills necessary for achievement, i.e. perceptual and cognitive development and language. For a more detailed description of the curriculum including specific lesson plans, the reader is referred to Gray and Klaus, 1966.

The children in each of the four groups were given a battery of tests, including the Stanford-Binet, the Illinois Test of Psycholinguistic Abilities, the Peabody Picture Vocabulary Test and the Metropolitan Readiness and Achievement Tests. Although Gray and Klaus believe that the crucial test of their degree of success in offsetting progressive retardation must wait until the children have been in elementary school at least two or three years, they feel hopeful concerning the outcome of their interim results.

On the Stanford-Binet the initial gains made by the experimental groups were quite dramatic. These gains were maintained until the children entered elementary school when there was a slight decline. The

scores of the experimental group were significantly higher than those of the control groups during the preschool years, but the difference between the two groups decreased when the control groups entered elementary school. The pattern of results for the ITPA and the PPVT were similar to those obtained for the Stanford-Binet.

Mean score differences on the Metropolitan Achievement Tests were in favour of the experimental groups. At the end of the first two years of preschool there were significant differences between experimental and control groups on the subtests for word knowledge, word discrimination and reading, but not on the arithmetic or spelling subtests. These findings are not surprising in view of the fact that the major emphasis in the curriculum was on language skills, not arithmetic.

Gray and Klaus gathered evidence of the effect their programme had on the community. They have some evidence to indicate that the local control group moved closer to the experimental groups in performance than did the distant control group. There was, also, anecdotal evidence to the effect that there was a rather complex communication net among the parents of the three groups with the result that parents of the local control group (i.e. those children who received no pre-school experience) attempted to augment the experience of their children modelled on the project's intervention. This was a most encouraging result.

Considering the fact that the actual preschool exposure was short-term and so minimal and not a full year programme, Gray and Klaus feel that the question is no longer whether intervention can be effective, but how can programmes be made more effective.

Although all of the programmes discussed so far have originated in the United States, the problems of early education and culturally different children are not exclusively American problems. The Brunswick Cornwallis preschool programme (Clark, 1967) has been operating in Halifax, Nova Scotia since 1963. The 44 children who attended the programme were chosen from among the poorest families in the neighbourhood and included equal numbers of white and Negro children. The purpose of this programme was twofold: (a) to prevent the academic retardation often characteristic of "culturally disadvantaged" children through an emphasis on the development of skills in perceptual discrimination, concept formation and language; and (b) "to provide interracial experiences that will prevent the effects of prejudice so damaging to both white and Negro children." Specific efforts were made to involve the parents in various aspects of the programme through volunteer work and the organization of monthly meetings.

To assess readiness for grade one, the Metropolitan Readiness Tests were administered to a sample of children in eight Halifax schools, including children from both middle and lower socio-economic families and children who had attended the preschool the previous year. The results showed that while the scores for the middle-class children were higher than those of the lower-class children, the scores for the preschool children did not differ from those of their lower-class peers who had not attended preschool. Although Clark feels that the preschool experience did improve the skills tapped by the readiness tests, she attributes the failure of these children to surpass their lower-class peers to the fact that the preschool children were selected from among those who most needed the experience and implies that their initial

scores would have been much lower. Since the tests were not administered prior to the preschool experience, this is of course speculative. It should be pointed out that these results are based on a very small number of children, i.e. 17 preschool children.

To determine whether there had been any modification of racial attitudes, a procedure developed by Clark and Clark (1939) was used (Crooks, 1967). Each child was shown four dolls, two white and two Negro. The investigator made eight requests of each child, e.g., give me the doll you would like to play with, give me the doll that is a nice colour, give me the doll that is a nice doll. The Negro and white children who were used as controls responded in essentially the same way, i.e. they thought that to be white was "nicer," to be brown was "bad." Both Negro and white preschool children differed significantly from the controls. Fewer Negro preschool children thought that to be white was nicer, while the majority of white preschool children felt that to be brown was nicer.

Crooks interpreted these results as indicative that the programme had achieved some success "in breaking down certain established forms of behaviour and...in building new ones" (p. 9).

No review of studies of Early Education under the auspices of the Toronto Board of Education could be considered complete without mention of the junior kindergarten programme. This programme, in operation in Toronto since 1949, has been subjected to a careful evaluation of its effects. Since the reader may obtain information from the Kindergarten Department concerning the programme (see also Wettlaufer, 1968) and from the Research Department concerning the studies undertaken to evaluate the programme (Research Department, 1965; Palmer, 1966; Palmer, 1966), a detailed description will not be provided in this report.

DISCUSSION

The foregoing chapters have outlined in some detail a few of the current early education programmes set up to meet the needs of "culturally disadvantaged" children living in urban areas. Although the programmes mentioned represent only a very small sample of the number in operation, they should give the reader some idea of the current state of affairs in this area of early education and should make clear that there are no simple answers to the questions raised in the introduction.

Perhaps the notion that there are "simple answers" i.e. "yes, early education programmes do make a big difference" or "no, they don't" is at the crux of much of the concern about such programmes. Why should we expect that there will be simple answers and that they can be found within a relatively short period of time? Why have we applied the particularly stringent requirement of "instant success" on this phase of the child's school experience? Do we ever ask "Does grade three make a big difference? And for how long?" Have we set up elaborate evaluation studies with matched groups of children, half of whom attended a grade three programme and the remainder who did not? Have we looked for the long-term effects of having attended a grade three programme? Would we expect that three or four years later, we should be able to detect on the basis of extensive testing any difference between children who had and had not attended grade three? If there were no differences between such groups, would we then decide to eliminate grade three because it didn't make a difference in terms of our test results? These are not questions which typically have been asked at any stage of either

elementary or secondary education, although perhaps Ontario, with its recent considerations of eliminating grade thirteen, has begun to ask such questions.

Why should we expect that early education programmes meet criteria far more stringent than those for any other phase of the child's school career? Most elementary and secondary school programmes have gone and are continually going (albeit oftentimes very slowly) through an evolution of change and development. It would appear that such should be the case also for early education programmes; but the postulation of the question "does it make a difference?" with the implication that it should be answered "yes" or "no" then eliminates the possibilities of a continuous developmental process.

Also implicit in the question "do early education programmes make a big difference?" are assumptions as to what the nature of the difference should be, i.e. the programme should completely eliminate the effects of the environment of poverty and discrimination in which the child has lived for the first four or five years of his life. But:

"Nursery schools cannot solve all of the social evils of the ghetto."

"Head Start is not an adequate antidote for the evils of discrimination and poverty."

"Treating one small symptom while ignoring basic causes will not make the problem disappear."

"No eight week or eight month preschool program can inoculate against deficiencies in a 12-year-school career."

(Pines, Brunner & Spodek, 1968, p. 46)

The question then becomes -- what can early education programmes do in eight weeks or eight months? What kind of programmes should we be developing or evolving? As is obvious from the previous specific

programme descriptions, there is a diversity of opinion on this issue. Some programmes have emphasized only the child's cognitive development with special attention paid to language skills, other programmes have attempted to attend primarily to the child's social and emotional development. Although within these two broad categories there are still many variations in method and approach, it seems that all of the programmes are still attempting to formulate a curriculum within the framework of traditional ideas and methods as to what constitutes "school" and what is required to achieve school success. According to Goodman (1969),

"...in our sincere attempt to improve the lives of the poor within our own society, ...we've set up a hypothetical model of correctness.... We talk about remediation, diagnosing their problems as if they were sicknesses and then prescribe medicine or actions which can solve these problems."

(Goodman, 1969, p. 3)

Rosenthal (1968), on the basis of his research on teacher's expectations of children, indicates that programmes for "culturally disadvantaged" children are based on the premise that "the deficiencies are all in the child and the environment from which he comes."

Should we make the "culturally disadvantaged" child conform to the expectations of the middle-class school? Or should we be attempting to determine what strengths, skills, style and conceptual abilities the child does have and attempt to build on these?

"Doing descriptive research of cultural patterns in order to have a more accurate picture of children's strengths is not simple."

(Goodman, 1969, p. 11)

Goodman, who studied the culture of the "culturally deprived" child by collecting samples of the children's games and songs discovered that the children had a different language pattern rather than no language at all as is often implicitly assumed. She began to doubt also that low scores on standardized tests of auditory and visual discrimination and rhyming words provided an accurate description of the capabilities of these children. The songs she collected from the children involved all of these skills, although the specific vocabulary was vastly different. We must learn to approach these children without preconceived notions concerning their skills and conceptual abilities.

What has research shown? What conclusions can be reached on the basis of the programmes included in this report? Programmes directed towards limited aspects of the child's development have had success in these areas for a limited time. No programme has been shown to have widespread effects. No programme has been demonstrated to make a major change which continued to be visible when the child continued to live and develop in the same environment and when the school system remained relatively the same.

REFERENCES

- Ahlfeld, Kathy. Pressure cooker teaching: how it's working out. Nation's Schools, 1969, 83, pp. 58-62.
- Beller, E. K. Annual report of research in the Philadelphia experimental nursery school project. Philadelphia: Philadelphia Council for Community Advancement, 1965.
- Bereiter, C., & Engelmann, S. Teaching disadvantaged children in the preschool. Englewood Cliffs, N.J.: Prentice-Hall, 1966.
- Berzonsky, M. D. An evaluation of an eight week Head Start programme. Paper presented at the American Educational Research Association Annual Conference, New York, February, 1967.
- Brazziel, W. F. Two years of Head Start. Phi Delta Kappan, March, 1967. Reprinted by J. L. Frost (Editor) in Early Childhood Education Rediscovered - Readings. New York: Holt, Rinehart & Winston, 1962, pp. 297-305.
- Bronfenbrenner, U. Memo: comments on the Wolff and Stein study. Washington: U.S. Department of Health, Education and Welfare, Office of Education, 1967.
- Clark, Barbara S. The Brunswick Cornwallis pre-school: a programme for disadvantaged white and Negro children. Child Study, 1967, 29, pp. 17-27.
- Clark, K. B., & Clark, M. K. The development of consciousness of self in the emergence of racial identification in Negro preschool children. Journal of Social Psychology, 1939, 10, pp. 591-599.
- Crooks, R. C. The effects of an interracial preschool program upon racial preference, knowledge of racial differences and racial identification. Paper presented to the Canadian Psychological Association, Ottawa, May, 1967.
- Deutsch, M. Facilitating development in the pre-school child: social and psychological perspectives. Merrill-Palmer Quarterly, 1964, 10, pp. 249-263.
- Di Lorenzo, L., Salter, R., & Brady, J. Prekindergarten programs for the disadvantaged: a third year report on an evaluative study. Paper presented at the American Educational Research Association Conference, Los Angeles, February, 1969.
- Edwards, F. P. Kindergarten is too late. Saturday Review, June 15, 1963. p. 68 ff.

- Getzels, J. W. Pre-school education. Teachers College Record, 1966 68 (3). Reprinted by J. L. Frost (Editor) in Early Childhood Education Rediscovered - Readings. New York: Holt, Rinehart & Winston, 1968, pp. 37-50.
- Goodman, Yetta. The culture of the culturally deprived. Paper presented at the American Educational Research Association Conference, Los Angeles, February, 1969.
- Gordon, M. Evaluation of the Wolff report. Washington: U.S. Department of Health, Education and Welfare, Office of Education, November, 1966.
- Gray, Susan W., & Klaus, R. A. An experimental preschool programme for culturally deprived children. Child Development, 1965, 36, pp. 887-898.
- Gray, Susan W., Klaus, R. A., Miller, J. O., & Forrester, B. Before first grade: the early training project for culturally disadvantaged children. New York: Teachers College Press, 1966.
- Hebb, D. O. The organization of behavior. New York: John Wiley & Sons, 1949.
- Hess, R. D. Education and rehabilitation: the future of the welfare class. Journal of Marriage and the Family, 1964, 26, pp. 422-429.
- Hess, R. D. Early education as socialization. In Hess, R. D., & Bear, Roberta. (Editors) Early Education - Current Theory, Research and Action. Chicago: Aldine Publishing, 1968, pp. 1-8.
- Hodes, M. R. An assessment and comparison of selected characteristics among culturally disadvantaged kindergarten children who attended Project Headstart (Summer Program, 1965), culturally disadvantaged kindergarten children who did not attend Project Headstart, and kindergarten children who were not culturally disadvantaged. Washington: U.S. Department of Health, Education and Welfare, Office of Education, 1966.
- Irwin, O. C. Infant speech: the effect of family occupational status and of age on use of sound types. Journal of Speech and Hearing Disorders, 1948, 13, pp. 224-226.
- Karnes, Merle. A research program to determine the effects of various preschool intervention programs on the development of disadvantaged children and the strategic age for such intervention. Paper presented at the American Educational Research Association Conference, Chicago, February, 1968.
- Karnes, Merle, et al. A comparative study of preschool programs for culturally disadvantaged children: a highly structured and traditional program. Urbana, Illinois: University of Illinois, U.S. Office of Education, 1966. (Contract No. OE6-10-235)

- Knoll, E. Will public schools control Head Start? Nation's Schools, June, 1966. Reprinted by J. L. Frost (Editor) in Early Childhood Education Rediscovered - Readings. New York: Holt, Rinehart & Winston, 1968, pp. 314-317.
- Lanc, Mary R., Levine, S., Elzey, F., & Sabath, Mildred. Evaluation of the Head Start orientation training program. California Journal of Educational Research, 1967, 18 (1), pp. 32-39.
- Milner, Esther. A study of the relationship between reading readiness in grade one school children and patterns of parent-child interaction. Child Development, 1961, 22, pp. 96-122.
- Montessori, Maria. The Montessori method. Translated from the Italian by Anne E. George. Introduction by J. McVicker Hunt. New York: Schocken Books, 1964 (originally published in 1912).
- Moore, O. K. Autotelic responsive environments for learning. In Gross, R., & Murphy, Judith, The Revolution in the Schools. New York: Harcourt, Brace & World, 1964, pp. 184-219.
- Moore, O. K., & Anderson, A. E. The responsive environments project. in Hess, R. D., & Burr, R. (Editors) Early Education - Current Theory, Research and Action. Chicago: Aldine Publishing, 1968, pp. 171-189.
- Osborn, K. Project Head Start - an assessment. Educational Leadership, 1965, 23 (2). Reprinted by J. L. Frost (Editor) in Early Childhood Education Rediscovered - Readings. New York: Holt, Rinehart & Winston, 1968, pp. 281-286.
- Palmer, Judith. The effects of Junior Kindergarten on achievement: the first five years. Toronto: The Board of Education for the City of Toronto, Research Department, 1966 (#34).
- Palmer, Judith. The effects of Junior Kindergarten on achievement: the first five years -- appendix. Toronto: The Board of Education for the City of Toronto, Research Department, 1966 (#34A).
- Pines, Maya. Revolution in learning: the years from birth to six. New York: Harper & Row, 1966.
- Pines, Maya, Brunner, C., & Spodek, B. How and what to teach the very young children. NEA Journal, 1968, 57, pp. 43-46 ff.
- Reidford, P., & Barzonsky, M. Field test of an academically oriented pre-school curriculum. Paper presented at the American Educational Research Association Conference, New York, 1967.
- Research Department. Study of achievement: junior kindergarten - who is served and who goes. Toronto: The Board of Education for the City of Toronto, Research Department, 1965 (#28).
- Riley, Clara M., & Epps, Frances M. J. Head start in action. West Nyack, New York: Parker Publishing, 1967.

- Rosenthal, R., & Jacobson, Lenore. Teacher expectations for the disadvantaged. Scientific American, 1968, 218, pp. 19-23.
- Rusk, B. A. An evaluation of a six-week Headstart program using an academically oriented curriculum: Canton, 1967. Toronto: The Ontario Institute for Studies in Education, 1968.
- Skene, Dora L. The "culturally deprived" in school and society: selected approaches. Toronto: The Board of Education for the City of Toronto, Research Department, 1966 (#32).
- Spock, B. D., & Hathaway, Mildred L. Montessori and traditional American nursery schools -- how they are different, how they are alike. Redbook, March, 1967. Reprinted by Joe L. Frost (Editor) in Early Childhood Education Rediscovered - Readings. New York: Holt, Rinehart & Winston, 1968, pp. 72-78.
- Weikart, D. P. Preliminary results from a longitudinal study of disadvantaged preschool children. Paper presented at the Convention of the Council for Exceptional Children, St. Louis, Missouri, 1967.
- Weikart, D. P., Kamii, C. K., & Radiv, N. L. Perry preschool project progress report, June, 1964. In Weikart (Editor) Preschool Intervention: A Preliminary Report of the Perry Preschool Project. Ann Arbor, Michigan: Campus Publishers, 1967.
- Westinghouse Learning Corporation. The impact of Head Start: an evaluation of the effects of Head Start on children's cognitive and affective development (Executive Summary). Athens, Ohio: Ohio University, 1969.
- Wettlaufer, Margaret, et al. Children's world; Holt's early childhood programme - teacher's guide. New York: Holt, Rinehart & Winston, 1968.
- Williams, W., & Evans, J. W. The politics of evaluation: the case of Head Start. Prepared for Annals of American Academy of Political Science, 1969, p. 118.
- Wolff, M., & Stein, Annie. Six months later -- a comparison of children who had Head Start, Summer, 1965, with their classmates in kindergarten: a case study of the kindergartens in four public elementary schools, New York City - Study I. Washington: U.S. Department of Health, Education and Welfare, Office of Education, 1966.
- Wolff, M. Appendix -- Studies I, II, and III. Original instruments used and bibliography. Washington: U.S. Department of Health, Education and Welfare, Office of Education, 1966.

